# AV Crash Course

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*AV Crash Course by Alixander Laffredo–Dietrich*

*www.conqueryourspeakingfear.com*

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**Foreword**

It was a bitter 34° and raining in the middle of November in Atlanta, Georgia. I had flown into town a few days prior to attend a business networking event with entrepreneurs from all over the world. At the time, I couldn't afford to stay in the hotel where the conference was at, so I slept in a cheap AirBnB that was a twenty-minute walk away. For three days I would wake up freezing in my little room that had a broken heater, take a cold shower, get dressed, and walk in the frigid rain with nothing but a flimsy umbrella to protect me from the elements.

When I arrived at the hotel, I would stay in the small foyer near the air vents to dry off my soaked clothes before walking upstairs to the conference room where the speakers would be presenting. For twelve hours each day I sat and listened, met tons of other business-owners, and soaked up every bit of knowledge I could from the people around me. After the day's end, I would grab my daily meal (which was just a few packs of trail mix from the hotel convenience store) and walk back to my AirBnB, where I would curl up under the blankets and use my breath to keep me warm.

I didn't have much money. In fact, my budget (I use that word very generously) was spent on my plane tickets. I was cold and hungry. I barely slept. However, for those three days I was totally invigorated. I took that knowledge, the ideas, the inspiration that was given to me during that event and for the next few months I applied everything I learned to my business.

And then the COVID-19 pandemic hit.

Suddenly, the networking events petered off. A few remained and I figured it was still worth a shot to attend. I signed up for one the following June that was hosted digitally. I could do everything from the comfort of my own home (which had a working heater) and eat more than just a pack of trail mix a day. I was beyond excited to learn more and meet new people.

The day of the event I logged on to Zoom and joined the event.

*Ten minutes later I was mentally exhausted.*

I couldn't pay attention no matter how hard I tried. My mind kept floating adrift. There wasn't the energy I remembered from the last event. To put it candidly, the speakers were downright boring.

How was it that I felt more invigorated after 72-hours of barely sleeping, freezing my buns off, and trekking through the rain, than sitting in my nice comfortable chair for only 10-minutes? The answer is simple, albeit impossible to measure.

*You see, those online speakers (and most online speakers) made the critical mistake of treating the online stage like the live stage.*

Folks, this is a *death sentence* for any aspiring speaker that wants to build an audience online.

Unfortunately, for anybody that wants to build an online audience, the odds are stacked against you. Not only must you be a better speaker online that you ever would need to be in person, but you also need to be able to consistently make top-quality content. For instance:

- Online platforms won't show your content unless you're engaging constantly.
- You must quickly create content so you can engage consistently.
- Online audiences are bored way more easily and can disengage any time.
- The technical learning curve in production and editing is steep.

And, let's not forget the fact that many feel more anxious, look nervous on video, and their stress is palpable! Speaking online is terrifying!

Consistency, speed, quality, and production value are all must-haves when it comes to attracting an online audience. If you don't think any of this doesn't matter, let me ask you this.

How many people do you know have found a sustainable influx of clients off just one speech? How many people do you know enjoy spending all their time trying to make content? How many people do you know enjoy Zoom meetings? How many people do you know like watching videos and listening to speakers that are poorly lit or have inaudible sound?

Now, I'm not a pessimist. In fact, I tend to look on the bright side of life (Monty Python, anyone?).

*However, the unequivocal truth is that speaking online is WAY harder than speaking in person ESPECIALLY if you want your audience to love you.*

The worst part is that many new online speakers feel that the virtual format is easier and as a result, they get lazy. Ever see someone give a speech online and you can tell they are simply reading their full speech draft off the screen? Maybe they are shy and never show their face. Perhaps they pay no mind to their lighting and audio and end up looking and sounding like someone in witness protection.

On the flip side, you have the speakers that are so over-polished that they look like robots. Perhaps you've seen them? Perfectly synched hand gestures, eyes that never blink, and borderline manic emotions. You may wonder, "Is this *really* how they talk?"

To be frank, I fell into each one of these pitfalls myself. I started with poor video, audio, and speaking presence. At this stage, nobody paid me any mind. I was completely ignored!

Then I overcorrected my technique and became the stereotypical motivational speaker who plastered on a big fake smile to come off as "authentic" on video. My following grew from

a few dozen to the thousands in just a few weeks; if you count fake accounts and bots that are attracted to that content but will never engage with you.

I tried to keep up anyway I could, but I continued to run into the challenges of speaking online. I sunk in so much time trying to generate online leads that ultimately led nowhere. I couldn't help but wonder…

*How on earth is it be possible to speak consistently and make top-quality content without spending hours a of my day doing so?*

Have you ever wondered this, too? If so, this the right book for you.

Over my years of running a public speaking coaching business and navigating that business through the COVID-19 pandemic, I have had to learn a lot of hard lessons about speaking online. The future of my business, and those of my clients, depended on it.

It's these lessons that I am going to share with you. Pandemic or not, the world is becoming more and more digital and if you want to grow, you must speak online.

The objective of this book is to help you speak clearly, confidently, eliminate your anxiety, reduce the stress of presenting online, and help you create useful and valuable content so you attract more people to you. Looking like a natural on video and speaking like a leader will help you:

- Grow your social media following
- Speak conversationally on podcasts
- Host webinars with confidence
- and, stand out on any online speaking platform

Let me be 100% transparent. This book *is not* on online marketing strategy. I am not qualified to tell you what to post, when to post it, how to post it, etc.

However, what I am qualified to do is to show you how to look and sound damn good when speaking online. Let's face it. It doesn't matter if you have the best digital marketing strategy in the world. If you are not charismatic online, nobody is going to want to follow or buy from you. Period.

If you want your voice to be heard online, you must do more than just speak. You must speak often and speak engagingly. You must look and sound your best. And, you must do all of these things in a way where you can sustainably manage your time.

I will show how you can pull all of this off no matter how much time you have, no matter your budget, and most importantly, no matter your speaking skill.

*By the end of this book, you will instantly look more confident online and be someone your audience wants to follow.*

It's time to rock,

Alixander Laffredo-Dietrich

**Let's Make it Beautiful**

*"Imperfection is beauty, madness is genius, and it's better to be absolutely ridiculous than absolutely boring." – Marilyn Monroe*

**Perfectionism Kills Consistency**

I'm a recovering perfectionist.

It is a constant battle for me not to tweak and re-tweak every little thing I make in hopes that one day I'll be perfectly happy with it. It's one of the reasons that despite going to one of the top art schools in the nation and putting in a ridiculous amount of work, I never became an artist. I would get so caught up on all the little nitty-gritty details that nobody but me could have noticed; and it was that habit that killed every one of my pieces.

It was the same thing when I first launched my business. As I've mentioned before I would spend entire days crafting little social plans that never went anywhere. I would focus so much on polishing my content that it became utterly exhausting. It also didn't help that I barely saw any fruits for my labor; after all, I had spent so much time editing my material that it felt corporate instead of human.

The perfect speech, or complex lighting, or fancy camera, or professional microphone didn't help me because it was so overwhelming! It was impossible to sustainably maintain my cadence of putting out content all by myself.

However, when I threw all the fancy lights and cameras and microphones out and learned to speak to my audience as I would a friend (with a few presentation tweaks to be more "camera friendly") lo-and-behold I found that making content was a cinch! Actually, I take that back…

*Make top-quality content was a cinch!*

And, the only thing I used was my phone. That's it! Pull it out of my pocket, hit play, and call it a day.

I eventually found that my domain in the speaking business worked better with podcasts and virtual webinars versus social media. I was tempted to go back to my crazy setups, but I soon found the rules still applied. I began giving speeches online using my laptop's internal microphone. No fancy setups!

The reason I tell you this is because as I've said time and time again the most important variable to your success is consistency. Period. The purpose of this book is to show you how to speak online easily so you can deliver top-quality content consistently. Much of what I've shown you is not about creating that "perfect" speech, but rather creating a series of natural, human conversations with your audience in a quick and organic format. Repetitions build quality. In other words, quality *through* quantity.

With that said, perhaps you may want to spruce up your content. I know I did. After I got used to using the basics consistently, I wanted to up my production value. Afterall, nobody wants to listen to an individual who has choppy audio and unflattering lighting. In fact, I'm willing to bet many of you reading this cannot stand the sound of your voice and think you look awkward on camera.

However, you would be surprised how much production value you can get for *absolutely FREE!* A few simple tweaks here and there will make you look and sound like a natural instantly. The only thing you need is your phone or computer.

Now, I will admit that there are some online mediums you really want to make as professional as possible. Don't worry; I've also included some basic editing concepts for you to use. If the words aperture, EQ, normalizers, and focal length sound like a foreign language to you, I will describe what they are and how to use them on a very high level to get you started.

By the end of this section, you should be able to make your online talks way more professional without spending a penny and be well-versed in the technology to make your online content outstanding!

## Exercise #1: When Would It Make Sense For Me to Use _____?

This part of the book is the most technical by far. Therefore, it's structured differently. You have but one exercise that will carry on through this book and this to constantly ask this question…

*"When would it make sense for me to use _____?"*

Replace the blank with the concepts I'll show you: Rule of Thirds, Hard Limiters, Cardioid Microphones, are just to name a few.

The reason I've structured it this way is because the equipment demands for an Instagram user is different than a podcast host. I will explain everything and give my opinion every now and then. However, I am sure you'll get the idea of when to use each tidbit I am going to share.

## Exercise #2: Your Phone/Computer is Enough (to get started)

I lie, two exercises. I said, most of what I'll show you is totally free but not everything. Still, your phone is all you need to get started. If you don't know what to do, just use your phone and laptop to record. That's it. Don't worry about being perfect. Worry about getting started and being consistent.

*That's how you become a stellar online speaker. That's how you attract an audience.*

**Chapter Summary**

- Your phone/laptop is all you need when you are just starting out.

- There is no correlation to the price of your equipment to your success as an online speaker; just speak.

- Looking and sounding professional is easily done once you know a few technical aspects (which I will show you).

**Audio and Video Hardware**

Have you ever lost your phone? If you haven't, you're either a liar or the patron saint of organization and I'm leaning toward the former.

We've all lost our phone at some point, and before there was "Find My Phone" there was the good ol' fashion method of calling your phone, praying it wasn't dead, searching everywhere, rinse, and repeat.

I was a disorganized early 20-something-year-old who lost his iPhone at my best friend's house during a visit. Anybody who knows me understands that I hate when my stuff isn't on hand.

"Stop everything! We are finding my phone!", I demanded. I borrowed my friend's phone and punched in my phone number. Good news; it was ringing, meaning my phone wasn't dead. Bad news; I heard my voice over voicemail.

"Ugh," I thought to myself, "Is my voice REALLY that nasally? It sounds like I'm a prepubescent boy speaking through a plastic straw." Now, in my defense, I was only a recent postpubescent boy, but the fact remained that I hated the sound of my voice. There'd be no way on Earth I'd ever dare put my voice out to millions of people around the world.

Chances are when you first hear yourself over play backed audio you've cringed as well. Or if you're lucky you have the voice of Barry White – but I'm banking on that not being the case. It's not just audio either. Many of us are equally embarrassed seeing ourselves on video. Granted, a lot of it is due to lack of exposure that can only cured by experience.

Still, there's always room for improvement and if you want your voice and skin to sound and look silky smooth, knowing what kind of equipment to get is crucial! Don't make the mistake of going out and getting any old mic or blowing hundreds to thousands of dollars on complex lighting rigs. In fact, an inexpensive mic that is carefully picked will make you sound better than a random one that costs ten times as much. Same thing with camera and lights. In fact, you have the best light right outside your door (the sun) and it's totally free!

Before we begin, I will refrain to tell you what you "should" get since you may be a podcaster, webinar host, social media influencer, or a whole host of possible disciplines. All I can do is give you the quick and dirty on what each piece does so you can make an informed decision.

First, let's start with audio. Why? Highlight this next point.

*People are way more forgiving of poor video than poor audio.*

Don't believe me? Would you rather watch a video in 240p or try to decipher what your friend is saying on the phone while wind is blowing in their microphone? I'd choose watching a pixelated video over snaps, crackles, and random volume spikes that'd make my ears bleed any day.

**Audio Hardware: 7 Free Tips for Quality Audio**

Let's start with a few tips on how you can make your audio stellar without spending a penny!

1. Point speakers away from your mic. This prevents the high-pitched feedback loop.

2. Input levels should be between 50%-75% (or  -6dB to -10dB, or just below yellow). This gives you room to edit and makes you loud enough to be heard without blowing out your speakers.
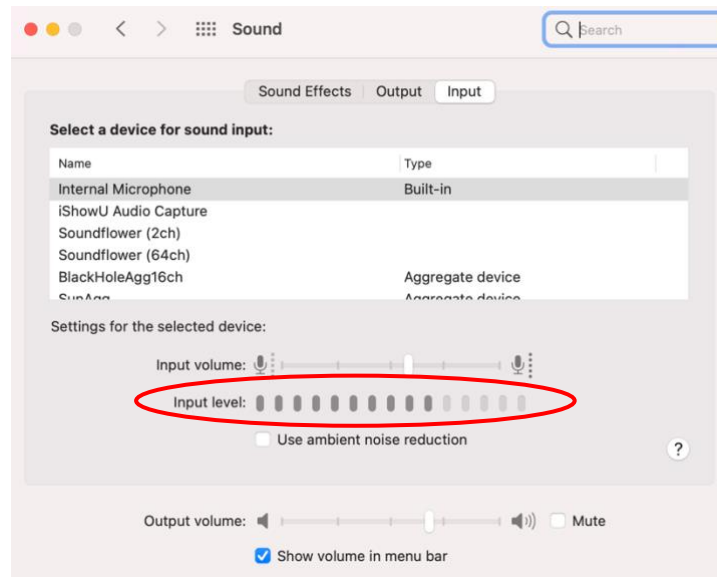


3. Place pop-filter 3-4" from microphone and speak 3-4" from pop filter. This allows the air to disperse when you make plosives ("p" and "b" sounds) without you being too far from the mic that it distorts your voice. If you don't have a pop-filter and don't want to spend $10 to get one, you can make on with a hanger and a dryer sheet.

4. Make sure microphone is at least one foot away from the nearest wall (the further the better). This prevents the mic from picking up excess reverb (echo).

5. Make sure whatever surface your mic/stand is on is not touching anything besides the floor. This prevents low end frequencies from being picked up.

6. Turn off fans or any extra noises that you can. Fans for example produce high-frequency background noise.

7. If you have an external microphone with headphones use them. This combo prevents audio leak (sound from your output being picked up by your input).

**Audio Hardware: Microphones**

Should you decide to spend money on better audio the most important piece of equipment is your microphone, hands down. Fortunately, knowing how they work can give you an amazing sound for cheap! There are plenty of microphones that will sound great for $100 or less!

**Dynamic or Condenser**

Dynamic? Condenser? What do these mean? Without getting into the nitty-gritty these terms describe how the microphone captures sound. There are other types of mics such as ribbon (these are what you imagine when you think of an early 20th century jazz singer), but you probably don't need to know about those for the purposes of producing online content.

**Dynamic**

They're tough, can handle high volumes without distorting, and affordable compared to most condenser mics. The downside is the audio signal isn't as refined compared to condenser mics. With that said if you just need something to speak into, these ones will do the trick just fine.

**Condenser**

Clear and detailed sound across low and high frequencies with a great tone. Be careful bringing these out of the studio though as they are prone to extreme environments and pick up lots of extra sound. They are also more delicate and expensive than their dynamic counterparts.

**Preamp or USB**

I'll make this short and sweet. Unless you are recording music, you probably don't need a preamp, especially if you plan on doing any recording outside of your home. Having a USB port that you can plug into and be good to go is extremely convenient. The only scenario I would see for content creation where you'd need a preamp is if you found the PERFECT mic that you would only use in your home and it requires one to operate.

**Diaphragm Size**

The diaphragm in the mic is what moves to the motion of airwaves to create sound. Generally speaking, you have small diaphragm and large diaphragm microphones.

**Small Diaphragm**

These do a good job of catching high frequency noises and have a more neutral effect on your voice. They also are more sensitive to changes in sound which is great if you want to capture little details.

**Large Diaphragm**

These ones produce a fuller and warmer sound and pick up more lower frequencies. They are known to make the human voice sound friggin' fantastic. I would personally opt for a large diaphragm if you are doing online speaking.
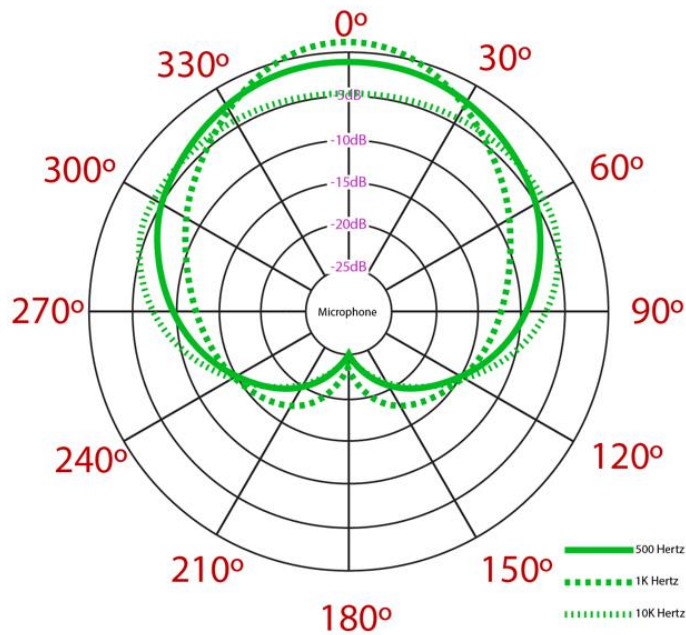
## Polar Patterns

Polar patterns show how the microphone picks up sound from its environment including Sensitivity, direction, and frequency.

**Reading the Polar Pattern Charts**

These charts look scary at first glance but they aren't that bad. Let's break it down. (The text in parenthesis below correlates to the graph).

1. *Sensitivity (Purple):* The center represents where your mic is placed. Every concentric circle expanding outward represents how sensitive the mic is to incoming sounds via decibel increments. Basically, the mic can pick up very quiet sounds the closer you get. The farther away, the louder the sound must be to pick it up.
2. *Degrees (Red)*: The lines expanding away from the center are generally 30-degree increments. This helps you estimate where the polar pattern shape lies in the audio field.
3. *Polar Patterns (Green):* These are the funny shapes that look like blobby hearts, circles, and ovals. We'll get into these more very soon.

4. *Frequency (Dashes):* These represent where in the audio field different frequencies get picked up at. Not all diagrams will show multiple frequencies.



**Polar Patterns**

*Cardioid*: This heart-shaped pattern picks up noise from the front and drops off at the back. Very versatile if you want to hear where the mic is pointing while eliminating sounds behind the mic. Good if you're solo recording or giving interviews.
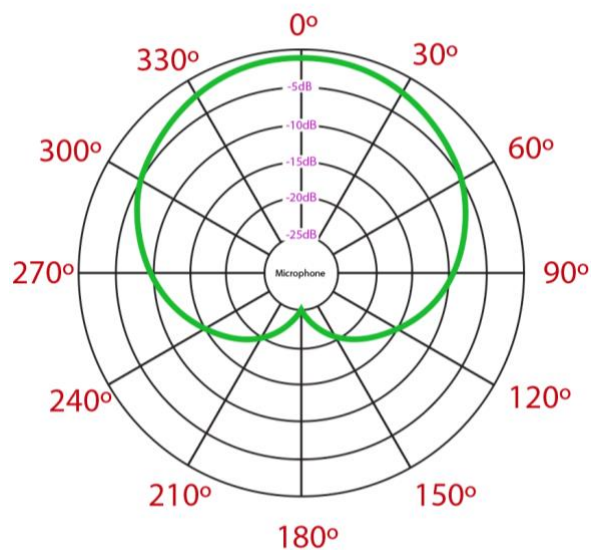
*Super Cardioid*: More directional than a cardioid. Usually has a small sensitive spot near the back of the mic.
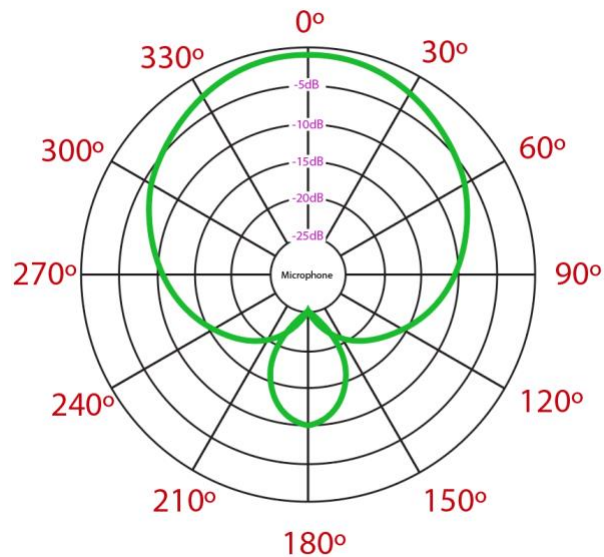


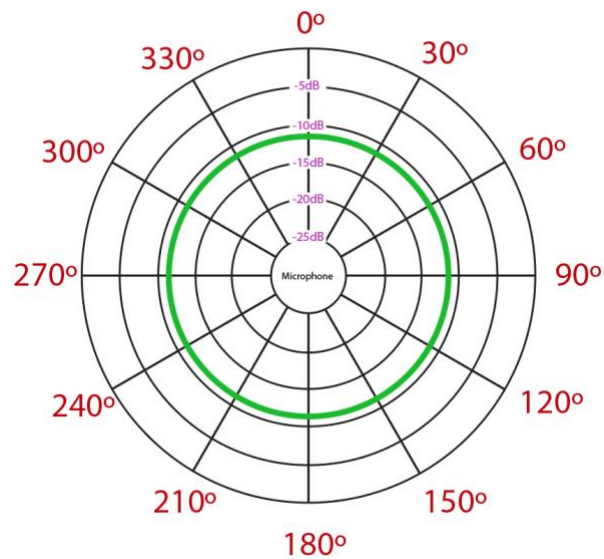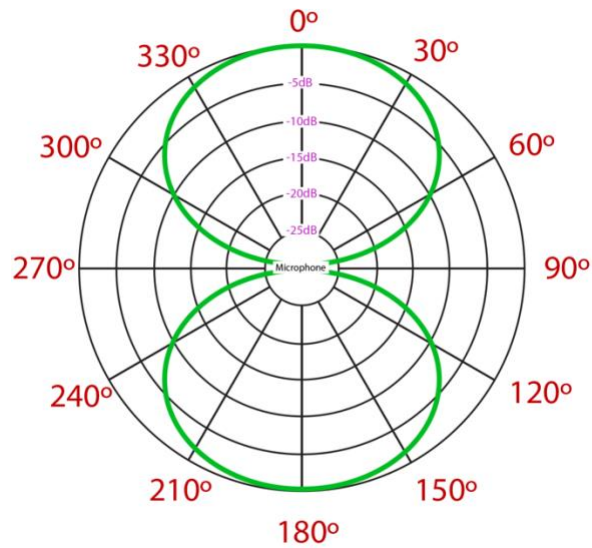*Omnidirectional*: Simple! A circle. This means it picks up sound equally from all directions.



*Figure-8/Bi-directional*: Picks up sounds equally from the front and rear while leaving out sounds coming from the side. If you only have one mic and want to podcast with in-person guests, this'd be a good one.

*Shotgun*: Highly directional with a long distance. These will often have a medium sensitive spot in the rear and small sensitive spots on the side. Great if you are doing field work or have to record a speech where you're up on stage at a distance.
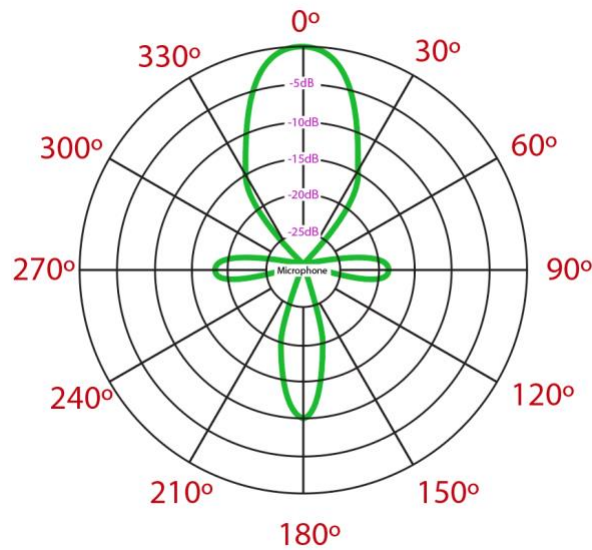


**BONUS: Proximity Effect**

The Proximity Effect describes how bass is picked up more the closer you get to the mic. Every here someone put a mic right up next to their mouth and it sounds like your speakers are going to blow out? Or if you are put on speaker and someone is chatting at the other end of the room and they sound really tinny? That's Proximity Effect.

The more defined the mic's direction is, the greater the Proximity Effect. For instance, a Shotgun mic is going to have a ton of Proximity Effect whereas an Omnidirectional will not.

**Audio Hardware: Speakers/Headphones**

Do you need a pair of fancy monitors? Probably not, and I would say they do more harm than good for content creation.

For most content creation you'll do just fine listening back over a pair of headphones, your phone, and/or your computer (after all, this is what your audience will be consuming media on).

If you do want to get better output to test your audio, grab some headphones with a flat frequency response. Here's how that chart looks:

1. Volume (Y-Axis)
2. Frequency (X-Axis)
3. The blue horizontal line in the middle (zero boost or reduction in frequency).
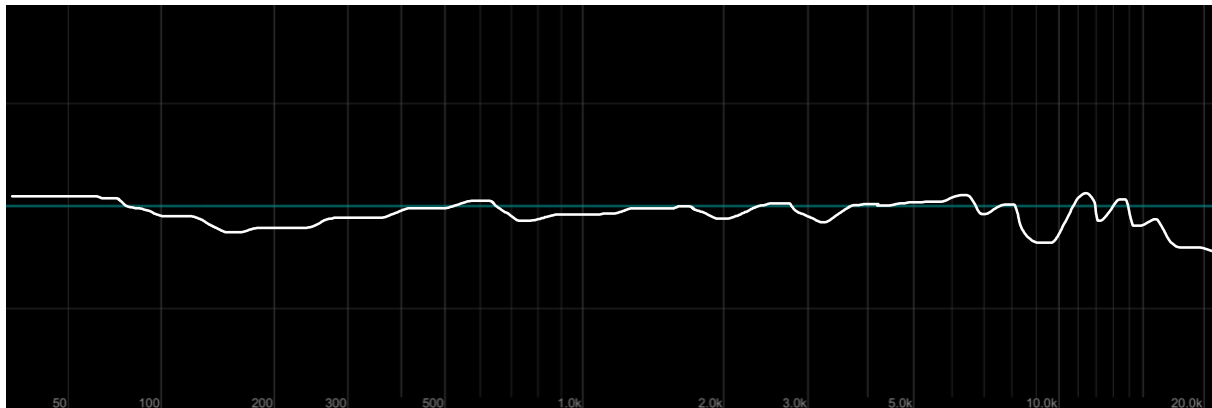


Ideally, you'd want a frequency response that is that blue line. However, you won't get a perfectly flat response chart no matter what you buy. With that said, to give you context, the above is an example of an excellent frequency response line. Not too much boost or reduction in any one area.
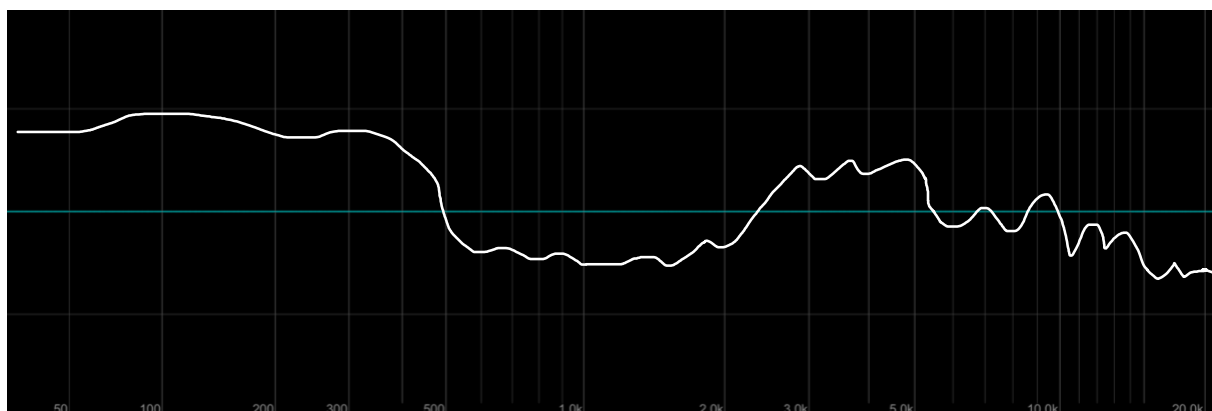
The one right above? Not so good. Notice how the bass is really boosted (the line is raised above the middle on the left side), the mids are very reduced (the line in the middle is below the blue line), then the highs are boosted followed by a drop off in the presence (presence are the frequencies above the highs). What this means is that the output in these headphones is going to sound much different than what your microphone is picking up.

Will it kill your production? Probably not. But let's say you have a deep voice, and your playback sounds muddy. If your headphones are boosting your bass (on top of you having a bass voice) that is going to contribute to your problem.

**Video Hardware: 7 Free Tips for Quality Video**

1. The sun is your friend. If you can record outside on a sunny day, do it. It truly is the best lighting.
2. If you can't go outside, open your windows. If your windows aren't enough, turn on all your lights in the room.
3. Remember "Closeness = Contrast". To prevent those distracting hard shadows and hotspots that make you look sweaty, position yourself a few feet from your main light and background.
4. Speaking of backgrounds, never-ever use virtual backgrounds unless it is very specialized branding. Even then I'd hesitate due to the fact that they cut your body parts off randomly.
5. Position your main light to point slightly down at your forehead. This mimics outdoor lighting. (Remember we like the sun).
6. Position your camera to point slightly down at your forehead. This defines your jawline.
7. You can create a diffuser by clipping a dryer sheet over your main light source if you are recording indoors. This will help soften the light.

**Video Hardware: Cameras**

**Smartphone or Webcam or Digital or Something**

Let's define these first. A smartphone is self-explanatory. Likewise, is the webcam, although you can purchase an external webcam or use the one built into your laptop if it came with one. That leaves us with various other camera types such as DSLR, Mirrorless, Action Cameras, Cinema Cameras, and more. Chances are you don't need a cinema camera, so we're going to stick with the most common types you would be in the market for if you wanted a camera.

*DSLR:* Digital single lens reflex cameras are what you think of when you hear the word "photographer". They are the cameras that often have detachable lenses. What's great is they have stunning picture quality and they come in plenty of price ranges. "Wait, isn't it a photo camera?" Yes, but many of them take quality video as well.

*Mirrorless*: These are smaller and produce higher video quality than their DSLR counterparts. However, they don't have as many options for accessories (like lenses) and they are more expensive than their DSLR counterparts.

*Action Cameras:* These are your Go-Pros and the like. Nice quality for the size and pretty affordable. They are very versatile, durable, and you can mount them pretty much anywhere. The downside is there isn't much customization (such as exposure, focus, etc.).

Most of what these cameras offer is overkill if you are just starting. A smartphone will get you very far if you don't have the money to drop on a new camera.

**Focal Length**

The focal length determines how much angle your shot has and how magnified the elements will be. Perhaps you've heard the term "Wide-angle Lens" before? That's in reference to the focal length.

They are generally measured in millimeters. Shorter focal length means a wider view and less magnification of each element in your shot. Vice versa for longer focal length. If you want to shoot a camera that has a similar "look" as one would see with the naked eye, go for a "Standard Lens" or a Focal Length of 50mm-60mm.

**Aperture**

If your camera is an eye, then the aperture is the pupil. Likewise, it functions the same way. The larger the aperture dilates, the more light it will let in and vice versa. This is measured by a number called your "f-stop". Examples would be f/2.8, f/4, f/16 etc.

Keep this in mind. The *smaller* the f-stop, the more dilated the aperture is. In other words, setting your aperture at f/2.8 is going to let in way more light than setting it at f/16.

Fiddling with your aperture has a ton of effects on your output, specifically how bright or dark your image is going to be. It will also affect your depth of field. Depth of field is the distance between sharp elements in your shot. A low f-stop creates low depth of field and vice versa.

For example, if you want to have a clear subject and blur out the background then lower your f-stop. If you want everything sharp, raise your f-stop.

**Megapixel Count**

First, you don't need as many as they are trying to sell you. Now that that's out of the way, what are megapixels?

Megapixels (MP for short) tell how much detail your camera can capture. It's a means of measuring how much resolution (we'll talk on this soon) can be captured. 1MP is 1,000,000 pixels. More megapixels mean more detail. With that said, most social media and computers will work fine with 2MP. If you want to shoot in 4K resolution (we'll get into this in a second), 8MP is sufficient.

Why would you need 12MP, or even 20MP as many phone and camera manufacturers try to sell you (for crazy amount of cash)? If you were shooting video for big screens or want to do super artistic video that needs a lot of data to be manipulated, then yes, the extra MP will help. Otherwise, it's just a waste of money.

**Resolution**

Resolution is the number of pixels within an image. So, a screen that is 1,024x768 means that it can fit 1,024 pixels horizontally and 768 pixels vertically. A 4K screen has 3,840 pixels horizontally (they round up) and usually 2,160 pixels vertically.

Higher resolution means higher quality. Let's go back to that 4K screen to show you how this ties into megapixels above.

3,840 x 2,160 = 8,294,400 pixels. Remember how 1 megapixel is 1,000,000 pixels? Divide 8,294,400 by 1,000,000 and you get about 8.3MP. Like I mentioned, 8MP is just fine for even super high-quality online content.

**FPS**

Frames per second shows how many individual images (frames) make up a second of video. Video works by taking a bunch of still pictures in quick succession and stringing them

together to create the illusion of movement. So, 24 FPS means that for every second of your video there are 24 pictures.

A higher FPS equates to smoother video and more detail being captures. In general, 24fps is good enough. But, if you can get higher, go for it!

**Sensor Size**

Remember how cameras used to use film? The light would be exposed to the film and an image would be made. Well, a sensor is the "film" for a digital camera (don't worry, you don't need to change it).

Bigger sensors can capture more information. However, because they are bigger, the camera itself needs to be bigger as well to fit the sensor inside. They are also more expensive. Again, unless you are doing crazy artistic shots you may not need a massive sensor in your camera.

**Video Hardware: Lights**

I'll save you a lot of pain and suffering and say just get a ring light. I have a $500 lighting setup and a $20 ring light and I use the ring light 99.99% of the time. It's easier and looks stellar! Again, if you don't want to spend the money and still look like a natural, go ahead and use those free Video Tips I wrote earlier. However, a ring light really makes it a million times easier.

With that said, there is one technical piece you should know about lighting.

**Color Temperature**

Color temperature is how warm or cool the light is. It is measured in Kelvin from 1,000 to 10,000. The lower the degree the warmer the light.

Most lights will fall anywhere between 2,000 to 6,500. Make sure if you do get a ring light (or light bulbs for your own setup) it has a setting for around 4,500K to 6,500K as this most closely mimics daylight.

**Audio Production**

**Setting Up**

If you want to record and edit audio, there are a few very affordable pieces of software that enable you to do so!

Of course, you can always use your phone (and I cannot highlight this enough). If you're just getting started, there are plenty of affordable apps on your phone you can use to do basic editing. However, if you are looking to edit on your computer, here are a few to use.

**Audacity:** It's free. What more can I say?
**OBS:** Another freebie. Also does video.
**Reaper:** This one isn't "free" but they let you use it, no cost, as long as you like. If you decide to purchase it (which I highly recommend you do), it's only $60 for life. Very affordable for a wonderful tool!
**Adobe Audition**: Super easy-to-use, with tons of tools built in. The priciest of them all, but if you already use Adobe Creative Suite you should have this at no extra charge.

**Mono or Stereo**

Mono means only one channel is used to produce sound whereas stereo means multiple. Why does this matter? If you're using mono, all sounds will come out of all speakers equally. If you are using stereo, you can edit your audio to have sounds come out of different speakers in different ratios.

I usually stick to mono. It's easier and you won't have to deal with weird audio artifacts you would run into with stereo.

**Amplitude, Volume, and Gain**

These three terms are very closely related, however knowing the differences between the three could save you A LOT of hassle when editing your audio.

**Amplitude**

In short, this is the strength of the signal. We can fiddle with the signal strength by various means but for the sake of content creation, the two you will deal with the most are volume and gain.

Before we get into volume and gain, I want to clarify two terms quickly: input and output. Input is when you're *putting in* sound. A microphone, for instance, is your input. Output is where your sound *comes out of*. A speaker is output.

Alright, let's continue.

**Volume**

Volume is exactly what we think of when we hear that word; how loud our sound is, measured in decibels. What's important to note is that measurement is taken after the original sound has been processed. In other words, the loudness of the output.

*This is important. Volume is the loudness of your output.*

What this means is that you can turn up the volume and it won't change how the signal will sound. Confusing? This will make more sense when we talk about gain next. Still, think of this example before we go further.

Let's say you record your voice. If you listen to the recording at a low volume on your speakers, it sounds like a quiet version of you. If you crank up your speakers, it sounds like a loud version of you. The quality and tone of your voice doesn't change.

**Gain**

If volume is the loudness of the output, gain is the loudness of the input also measured in decibels.

*This is important. Gain is the loudness of the input.*

What this means is that the level of gain you use when recording audio is going to affect the quality of the sounds when you play it back. Let's compare this to volume so you can get a better idea.

Let's go back to our first example where you recorded your voice. If you set your microphone (your input) to a lower gain, it won't pick up on the subtle changes in your voice, your fan in the background, etc. Your *volume* on your speakers (because speakers are output) will playback a relatively flat signal. If you turn it up the *volume* on your speakers, you'll just get a loud flat signal.

Now, if you record your voice with high gain, your voice may sound more dynamic. You may hear the fan in your room blowing. It may change the tone of your voice since it's picking up more sound. When you play this back at high or low volumes, all those elements will still be heard in your output.

**DeEsser**

It's just what it sounds like; it de-esses. Sounds like "sss", "shh", "t", and so forth are called sibilance. They do not sound very good on recording.

DeEssing is my friend. In my natural speaking voice I tend to end words that end in "s" with a light "sh" sound (like in "sugar"). I have a slight overbite and I'm guessing this is the case. Either way, I know the quality of my speech and know what tools I need to utilize to even things out over the recording.

Sibilance happens in higher frequencies (slightly different from person to person). A DeEsser simply lowers the volume or compresses those frequencies to cut out the sibilance.

**Envelopes (ADSR) (Draw pictures)**

v        Envelopes are how we "shape" the sound. We can use these for everything; amplitude, filters, compressors, fades. We can adjust these via four controls –ADSR– which stand for Attack, Delay, Sustain, and Release. (This picture was taken from the Helm Plugin on Reaper, but they all look pretty much the same).
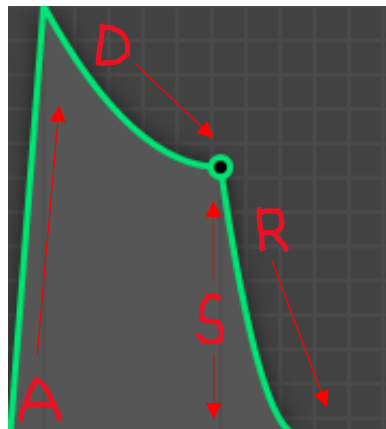


The Y-Axis is volume and the X-Axis is time.

It's worth introducing these concepts because some of your editing tools may have ADSR on them and it's good to know what they do. These can be difficult to understand without examples so I'll give a high-level definition and then give examples afterward.

*Attack*: How quickly a signal goes from 0 to 100% of its volume.
*Delay*: How long it takes a signal to go from 100% down to the Sustain level.
*Sustain*: How strong the signal is while the envelope is active. In the graph above, once the signal reaches the delay time it will hover at the green circle until the envelope is released.
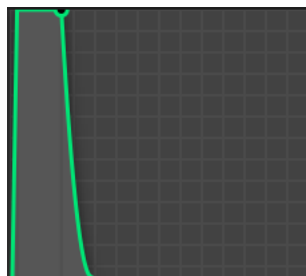*Release*: How quickly the signal goes from its Sustain level to 0 volume after the envelope is released.
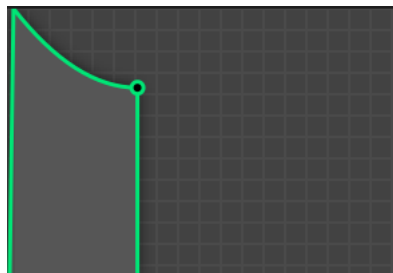
Let's look at some examples:

A cymbal has an immediate attack, a long delay, little sustain, and a long release.
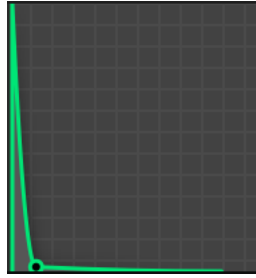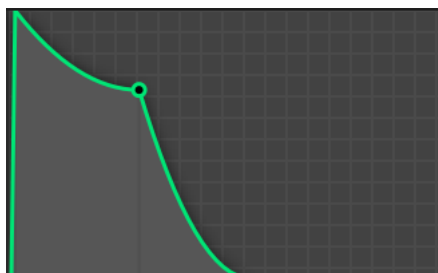


A violin has a quickly ramping attack, a delay as long as the bow is being drawn across the strings, strong sustain, and a quick release.



A piano key you hold down has a quick attack, slow delay, strong sustain, and an immediate release…



…However, if you hold the rightmost floor pedal it increases the sustain and release.



"I'm not playing instruments or recording music so why are you teaching me this?" you may be thinking. Take a compressor, which is a handy tool for editing podcast audio.

Compressors work using envelope features like "Attack" and "Release". Of course, there are other tools that use envelopes as well.

The point is envelopes are so ubiquitous in audio production that it is good to know what they do by themselves.

**Limiters and Clipping**

Limiters and Clipping work to prevent your audio signal from breaking a certain threshold in slightly different ways. For these examples, let's make the threshold -6dB

A limiter (you'll probably see "Hard Limiter") won't affect the audio unless it passes -6dB at which point the signal is compressed to stay at or below -6dB.

Clipping will shave off all the audio signal after -6dB.

A goofy example is imagine having a massive afro. You want your afro to be no longer than 6 inches on any side.

A limiter would be like wearing a hat to smush all your hair down to 6 inches in length. You aren't losing any hair.

Clipping would be like getting a haircut so it's only 6 inches long. That hair that got cut off is gone.

**Normalizing**

Normalizing raises all of your audio signal to a new peak. It takes the loudest signal and moves it up to that new peak while taking every other signal and moving it up the same amount. It's easier to explain with an example.

Let's say you have an audio file that has a peak amplitude of -6dB. You want to normalize it to -3dB (a difference of +3dB). When you normalize, it adjusts EVERYTHING by +3dB. The result is a new peak amplitude (or loudest point) without changing the dynamics or shape of the audio.

Going back to our afro example, imagine you have an afro in which the longest hair is 3" long. Now, some hairs are 2", some are 2.5". You want your longest hair to be 6" long. You let your afro grow 3" all around so that your longest hair becomes 6". Your other hairs also grew 3" as well and are now 5" and 5.5".

**Compression**

Compressors "squash" your signal. The result is a less dynamic and fluctuating sound. The reason you may want to do this is so that your volume stays consistent, you cut back on harsh transients (clicks, pops, etc.,), and make everything sound more natural.

There are a few things to note here that we haven't explained yet: Threshold and Ratio.

*Threshold*: This is the point the compressor begins to work. If your threshold is -6dB, the compressor will start compressing any signal above -6dB.

Ratio: This can get tricky. Basically, this is how much the compressor is working. The higher the ratio, the stronger the compression.

It is read as X:1 (i.e. 1:1, 2:1, 10:1, 2.456:1, whatever you want). What this means is that for every XdB you go ABOVE the threshold, you will get 1dB output. Let's illustrate.

Let's say your threshold is -9dB. Your ratio is set to 2:1. Everything beneath -9dB will remain unaffected. For every 2 dB you go above -9dB you will get back only 1dB of output.

The uncompressed audio is represented by the blue line. The Y-axis is the loudness in decibels and the X-axis is time. The red line is the threshold at -9dB.
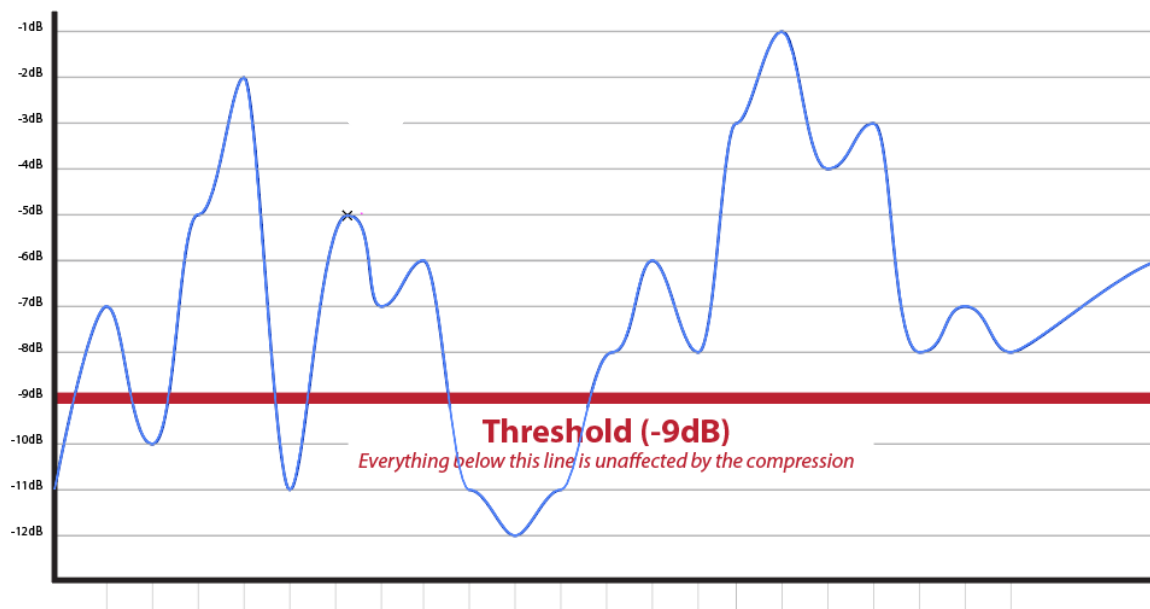


Now, you put a compressor with a 2:1 ratio on the audio. What comes out is represented by the orange line.
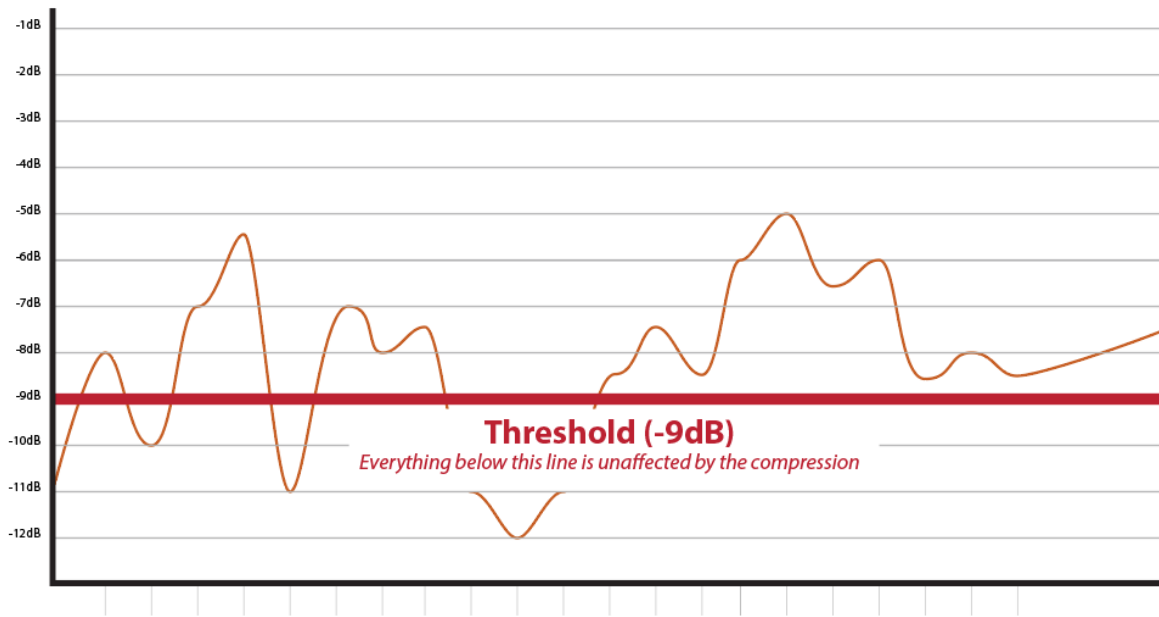
Notice how it "squashed" the audio? If not, don't worry. This next image shows what the uncompressed signal (blue) and the 2:1 compressed signal (orange) look like next to each other.
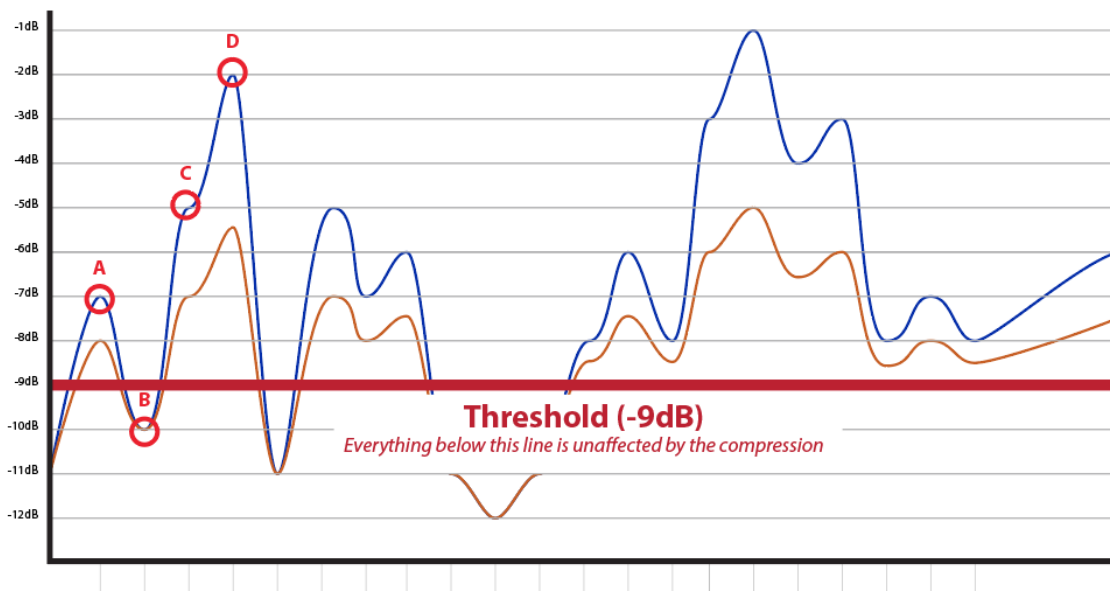


What happened?

First, everything under your -9dB threshold remained the same.

After that, let's look at a few points. In "Point A", you went to -7dB (that's +2dB from -9dB). Because it's 2:1, you only get 1dB back. Therefore, your signal gets compressed to -8dB.
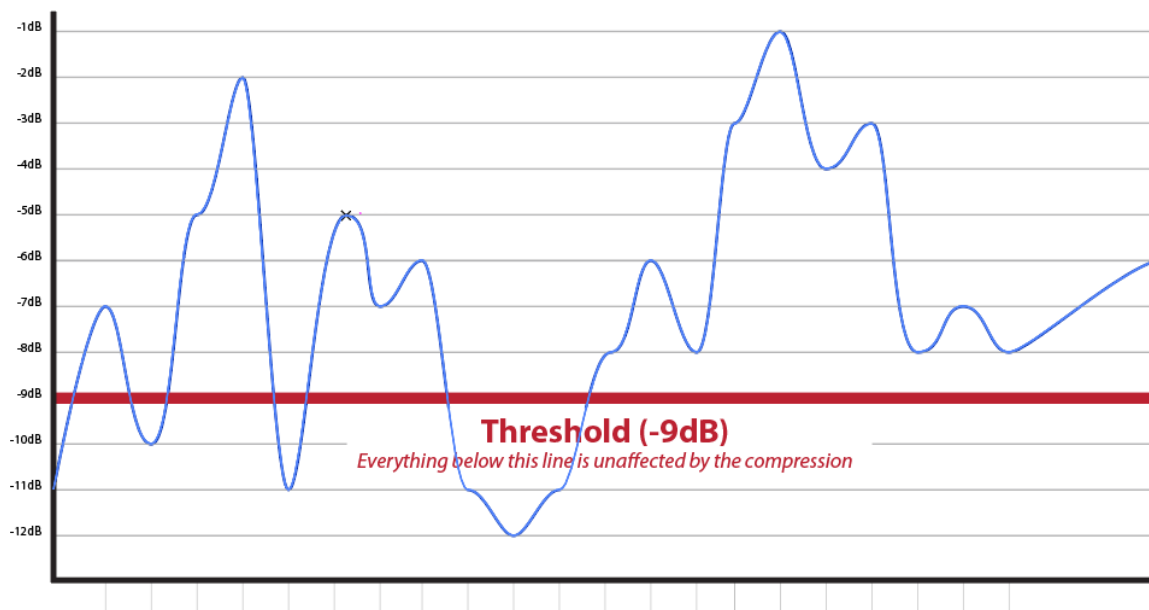
In "Point B", you stay under -9dB so it isn't affected.

In "Point C", you went to -5dB (that's +4dB from -9dB). Because it's 2:1, you only get 2dB back. Therefore, your signal gets compressed to -7dB.
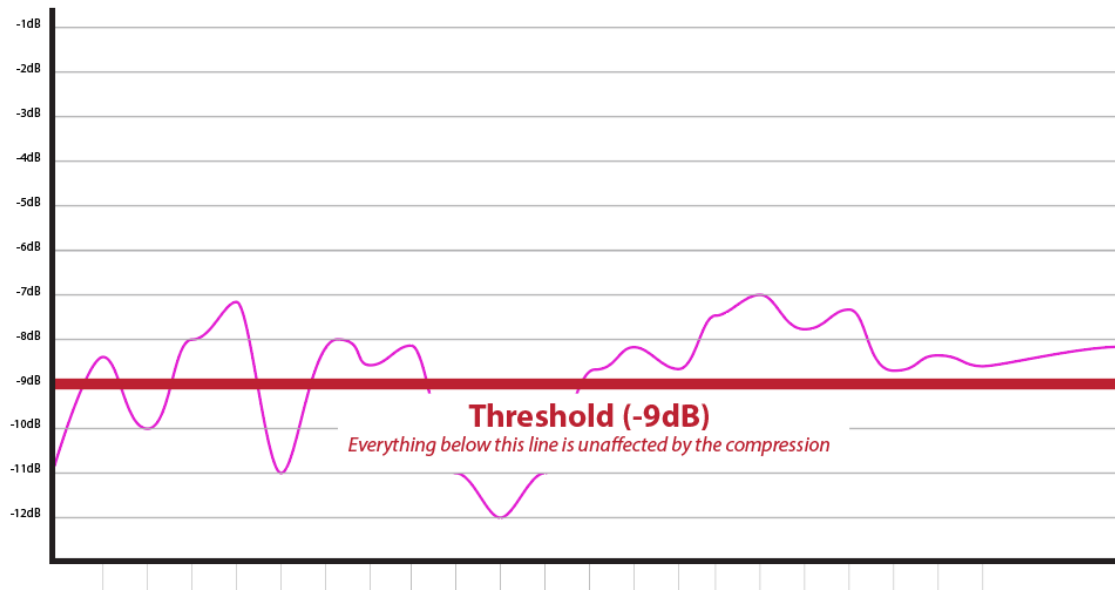
In "Point D", you went to -2dB (that's +7dB from -9dB). Because it's 2:1, you only get 3.5dB back. Therefore, your signal gets compressed to -5.5dB.

The same pattern continues for the rest of the audio signal.

Let's try another example. We'll keep the -9dB threshold. But this time we'll do a 4:1 compression. Here's the uncompressed signal again.



Threshold (-9dB)
*Everything below this line is unaffected by the compression*

Now with the 4:1 ratio. The compressed line is purple.



Wow! Way flatter than before. Let's look at them back-to-back. Uncompressed is blue, and 4:1 ratio is purple.
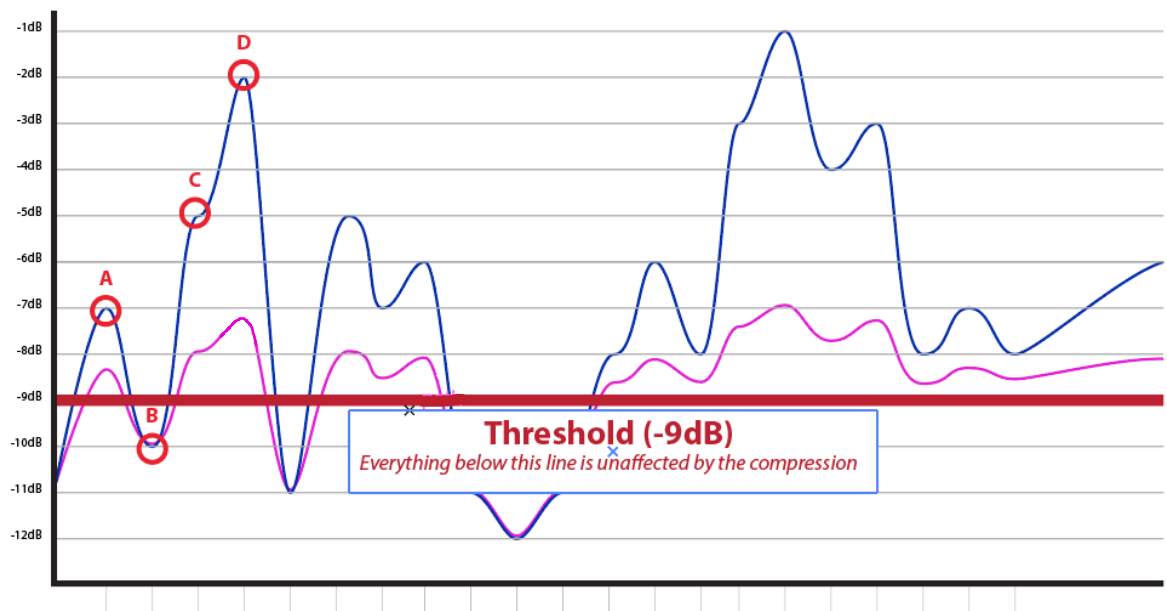


In "Point A", you went to -7dB (that's +2dB from -9dB). Because it's 4:1, you only get .5dB back. Therefore, your signal gets compressed to -8.5dB.

In "Point B", you stay under -9dB so it isn't affected.

In "Point C", you went to -5dB (that's +4dB from -9dB). Because it's 4:1, you only get 1dB back. Therefore, your signal gets compressed to -8dB.

In "Point D", you went to -2dB (that's +7dB from -9dB). Because it's 4:1, you only get 1.75dB back. Therefore, your signal gets compressed to -7.75dB.

Let's put the end compression side by side so you can see how a higher ratio creates more compression! Uncompressed is the blue line. 2:1 ratio is the orange line. 4:1 ratio is the purple line.
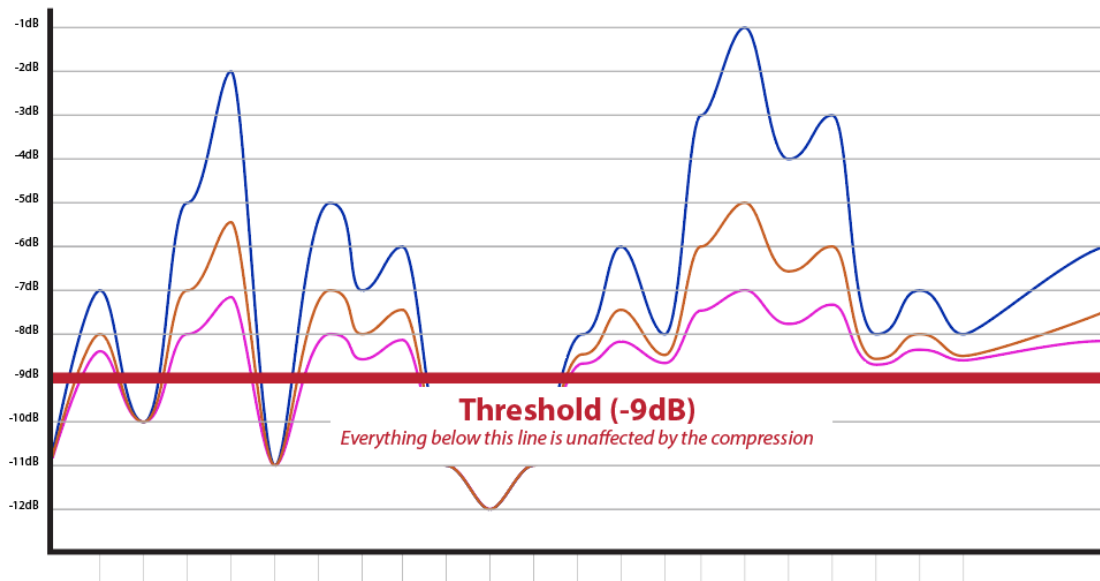


Wow! The 4:1 ratio really flattens it out compared to the 2:1.

In short, more ratio means flatter audio.

*Quick note: A 1:1 ratio is a fancy way of saying that a signal isn't compressed. An infinity:1 ratio completely cuts off any signal above your threshold.*

**Filters and EQ (Pictures)**

Before we dive into this let's look at how to read this chart below. This image is ReaEQ which is an EQ plugin for Reaper but other EQs will look similar.

It's very similar to the frequency response chart and it represents the same info. The Y-axis is volume (going louder as you go up) and the X-axis is frequency (getting higher-frequency as you go right).

In addition we have a blue line which is our EQ that we can adjust. Finally, the yellow squiggly line is the audio itself. By using EQ and filters, we can shape the yellow line and make it sound different.
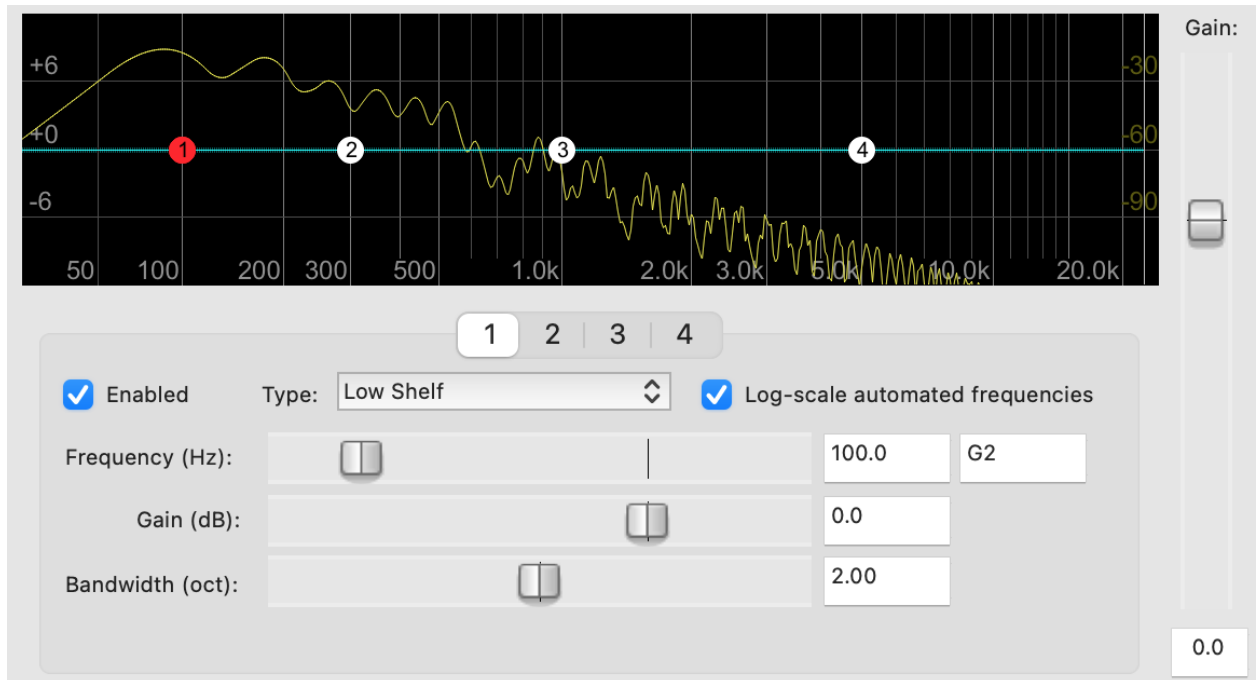


### EQ

EQ stands for equalization. EQ allows you to adjust the strength of specific frequencies. Let's say your voice is high-pitched and sounds shrill over recording. You can use EQ to lower the high frequencies and raise the lower frequencies to even out the sounds of your voice.

This concept is the basis for how filters work.

### Filters

Filters allow certain frequencies through and "filters" unwanted frequencies out. I like to think of filters as pre-packaged common EQ settings you can tweak. There are a few ways you can do this to enhance the sound of your recording.

*Note: The faded yellow squiggly line in the following images represents the audio signal before the filter is applied.*

Low Pass/Hi Cut: This type of filter lets all the low frequencies pass and cuts out the high frequencies. Great if you have background noise or a tinny sound you want to adjust.
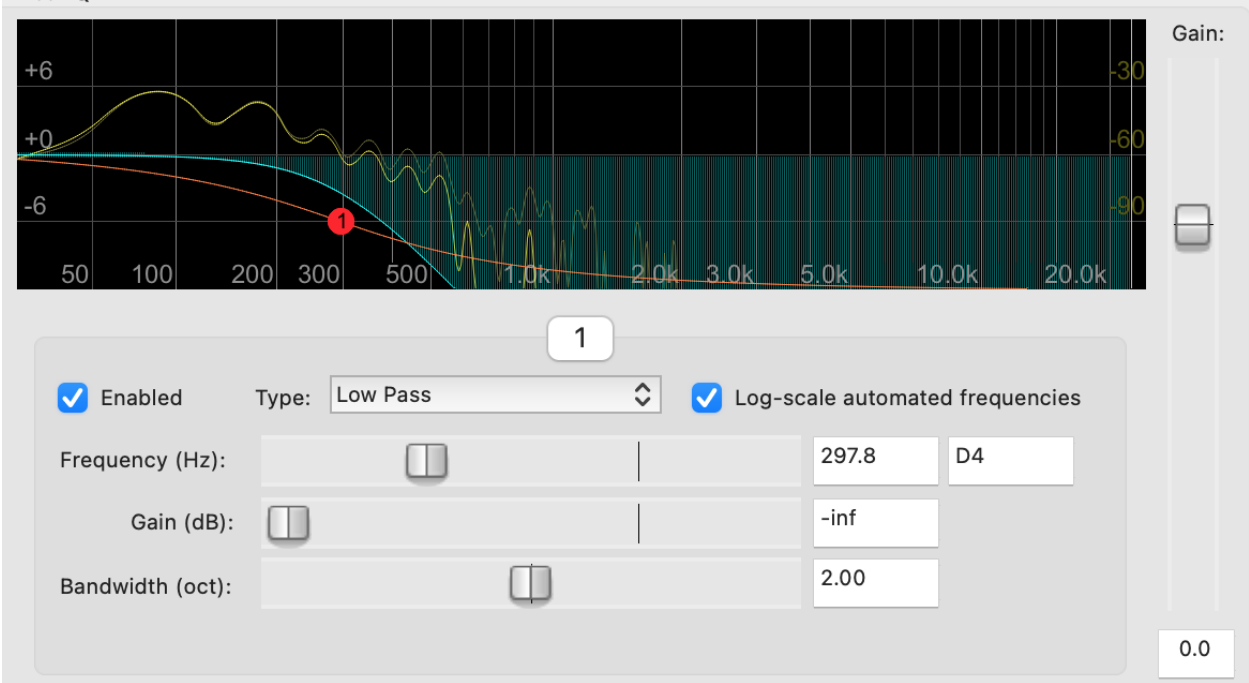
Hi Pass/Low Cut: This type of filter lets all the high frequencies pass and cuts out the low frequencies. Great if there are rumbles from handling your mic or the sound is muddy and blown out.
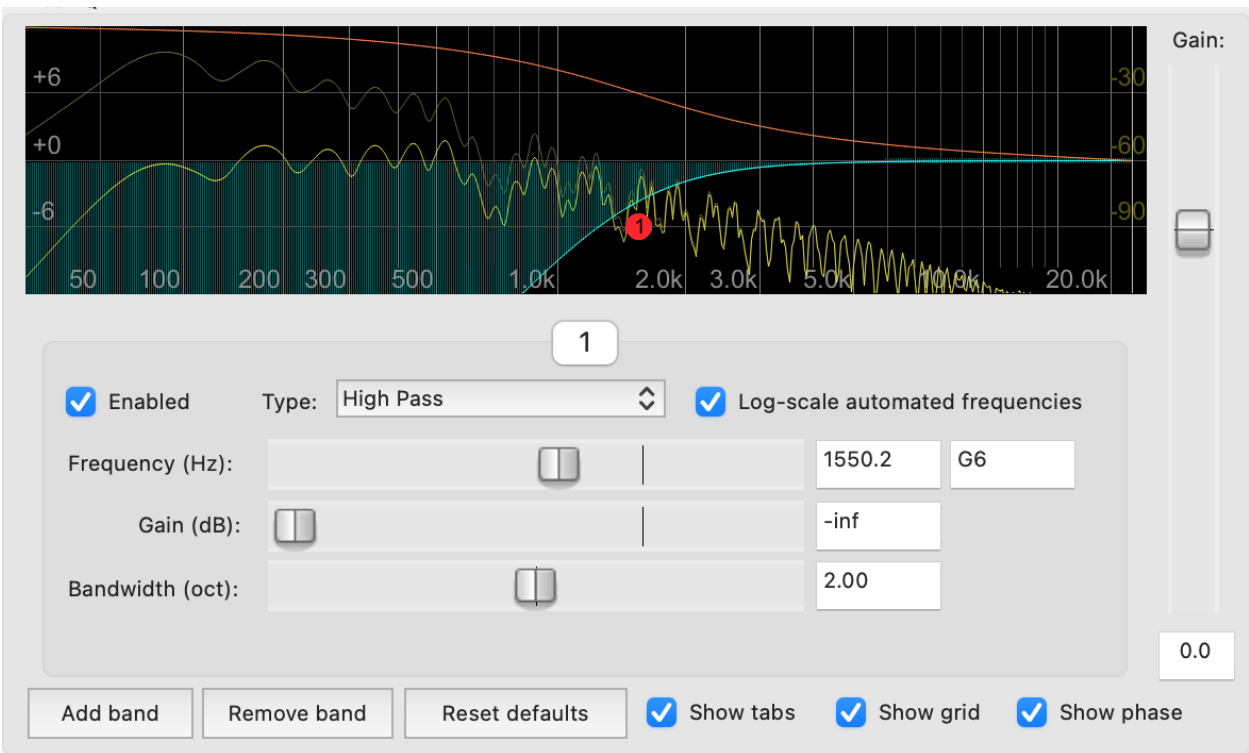
High Shelf: This type of filter boosts or diminishes the high frequencies and doesn't affect the low frequencies. Great if you're happy with your low frequencies but need to tweak your high frequencies.
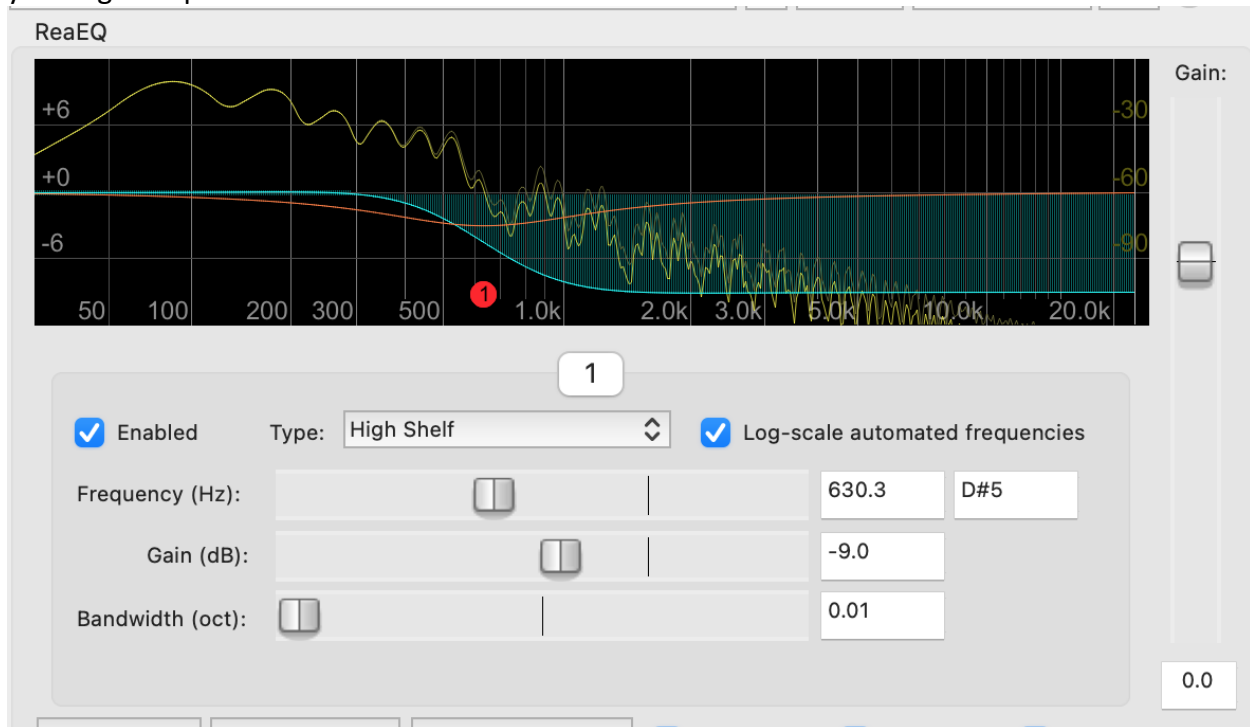


Low Shelf: This type of filter boosts or diminishes the low frequencies and doesn't affect the high frequencies. Great if you're happy with your high frequencies but need to tweak your low frequencies.

Bell: This type of filter boosts or diminishes the middle frequencies and doesn't affect the low or the high frequencies. Great if you're happy with your high and low frequencies but need to tweak your middle frequencies.
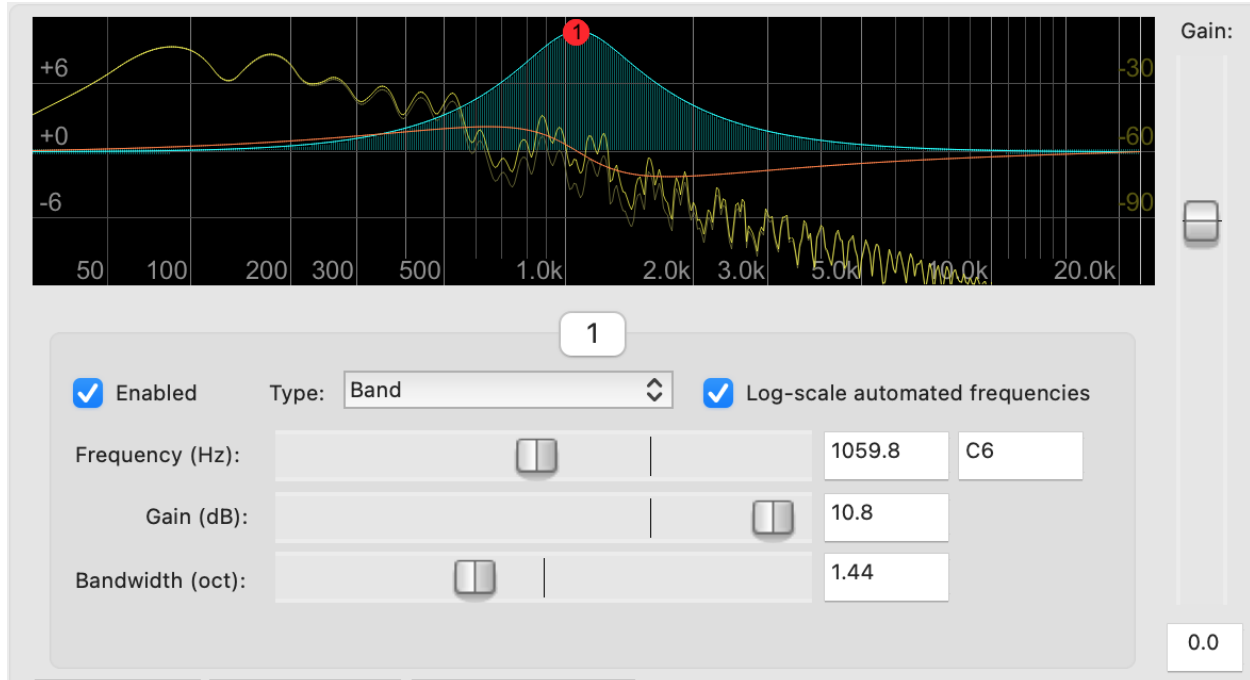


Notch: This type of filter cuts out all frequencies at a very specific point. Great if there is a certain unpleasant sound that you want to remove without greatly affecting the other

frequencies (i.e. a whistling sound when you say "s" or plosives that made it through your pop filter).
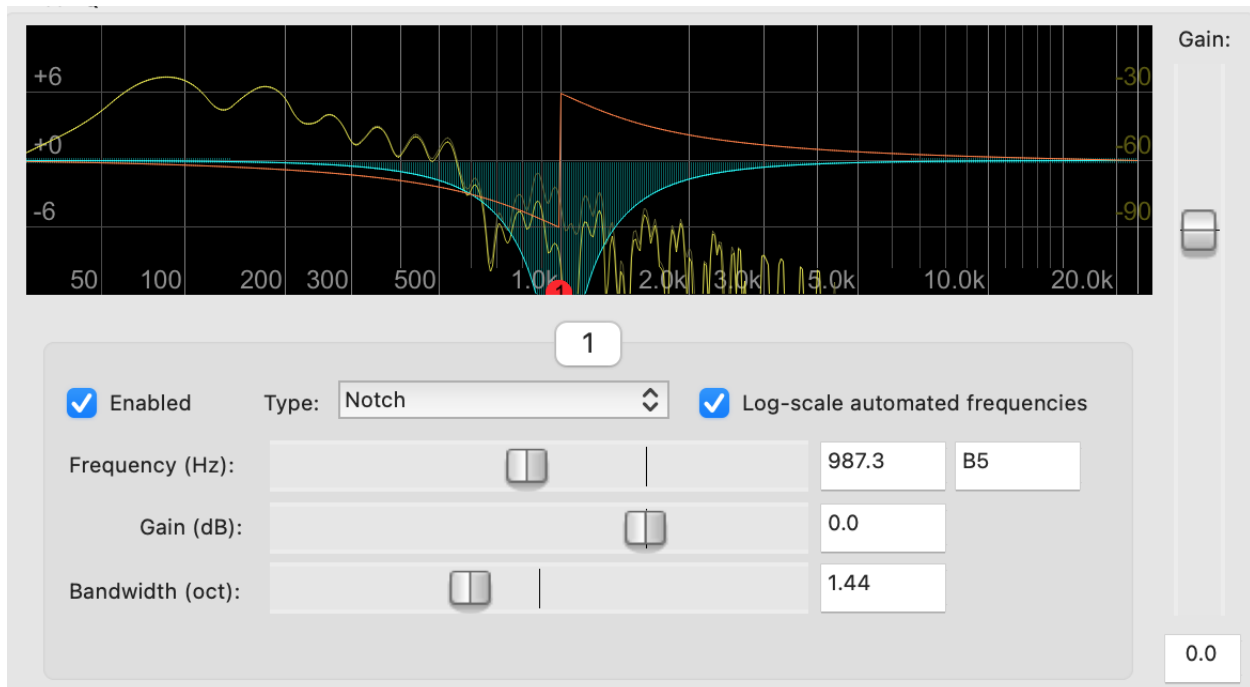


Band Pass: This type of filter allows only a range of frequencies through. Great if you want to isolate a range of frequencies.
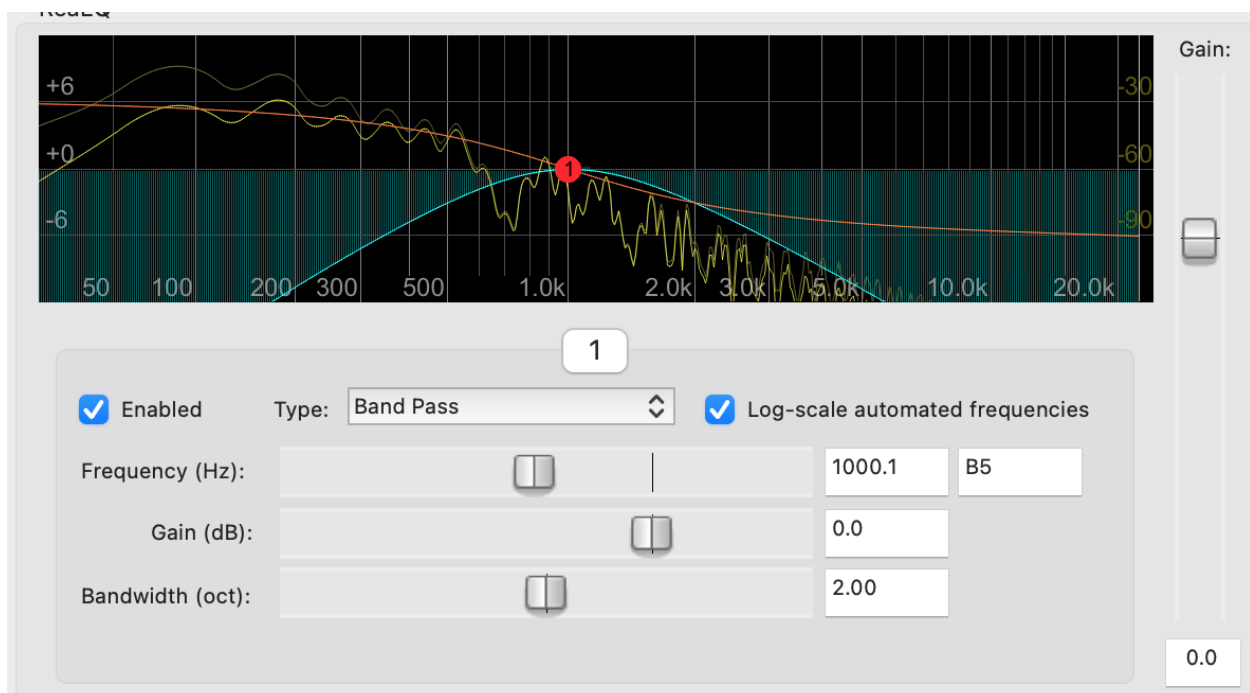
**Video Production**

**Composition**

First on the list is composition which means how the elements of your image are placed in the frame. A lot of people like to sit front and center and stare directly into the camera. This does work, but only if done purposefully.

Think of your frame like a painting. You wouldn't just plop a person randomly on the canvas, would you? Instead, you'd want to be thoughtful of where you're placing that person as to not ruin the look of the painting. Here are a few easy-to-follow composition tips.

*Rule of Thirds:* When in doubt, use this. Basically, if you were divide your frame up into thirds by length and height, you'd want to place your most important elements on the dividing lines. Generally, give more negative space towards the side the subject is looking. This type of composition gives your video more sense of movement and dynamism. Notice in the image below how the two most important elements (me and the whiteboard) are aligned on the thirds of the image?
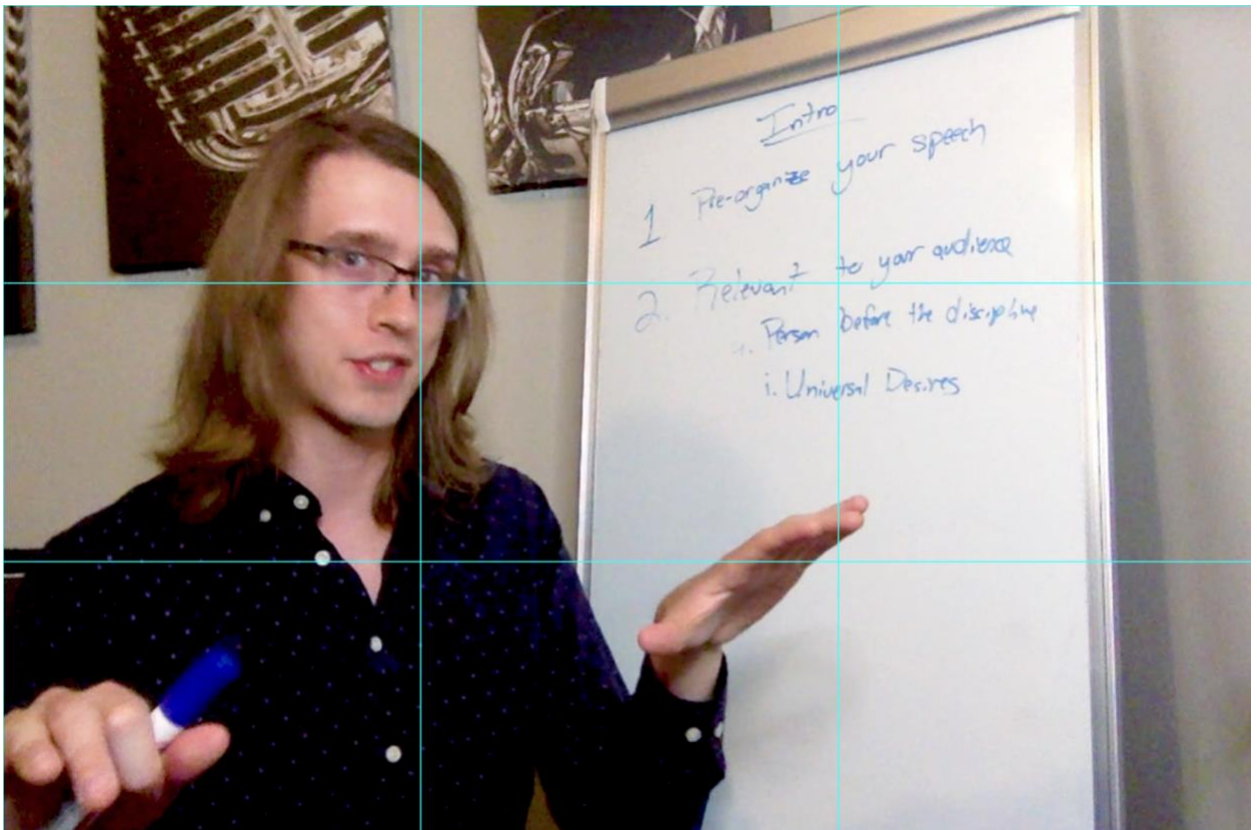
*Centered/Symmetrical:* Simply put, you are in the center of the image. Great for a static, stable feel. You can combine this with elements of the rule of thirds by making sure your eyeline is situated in the top third of the frame. The rules apply for the image of me below.



*Leading Lines:* If you have other elements in your photo besides you, experiment in getting them to "point" to you. For instance, if you have clutter on your desk, you can rearrange it to make a line pointing to you in the frame. In my picture I have my whiteboard, pictures, and a bit of my cabinet in the background angled towards me.
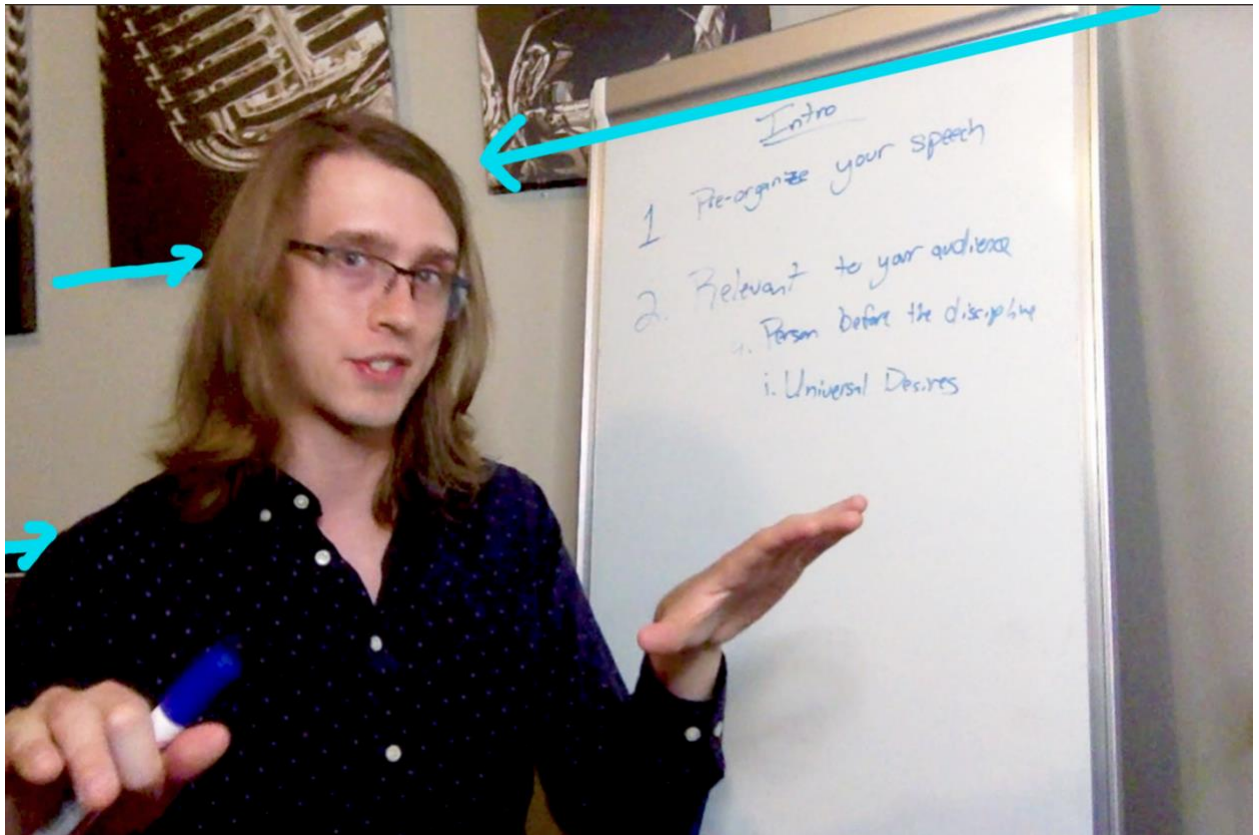
*Internal Framing:* One of my favorites. Basically, you put yourself inside a frame within the frame of your overall image. I'll often stand so my head is "framed" within the darkness of the picture behind me just like in the image below.

**Exposure**

      Exposure is how much light you are letting into an image. Over-exposed means the image will be bright and under-exposed means the image will be dark. Done tastefully, these can give some cool effects! For instance, over-exposed images can give a dreamlike, angelic sense (might be cool if you're giving an inspirational speech). Likewise under-exposed can feel dark and dreary.

**Highlights and Shadows**

      Adjusting highlights and shadows will affect the brightest and darkest portions of your image, respectively. Raise them and they get brighter. Reduce them and they get darker. Not too difficult!

For example, if you had a picture of a ball that had a bright spot where the light shines and a shadow where it touches the floor, highlights would control the bright spot without touching the shadow. Shadow would control the shadow without touching the bright spot.

**Brightness**

Imagine if your highlights and shadows control was lumped into one. That's brightness. It uniformly controls the lights and darks.

For example, if you had a picture of a ball that had a bright spot where the light shines and a shadow where it touches the floor, turning the brightness up would affect only the bright spot and turning it down would only affect the shadow.

**Tint and Shade**

Tints add white to a color (think of how pink is just a tint of red) whereas shade adds black to a color. The more you boost these, the more tint/shade is applied.

For example, if you had a picture of a ball that had a bright spot where the light shines and a shadow where it touches the floor, turning the tint up would lighten both the bright spot and the shadow and turning it down with darken both the bright spot and the shadow.

**Contrast**

Contrast is how far away the lights and darks are from one another. To give an example a pure black and white image (no gray tones) is ultimate contrast. Tweak this and see your images pop to life. However, do this too much and you'll start to see noise and hard shadows that can be distracting.

For example, if you had a picture of a ball that had a bright spot where the light shines and a shadow where it touches the floor, turning the contrast up would lighten the bright spot and darken the shadow and turning it down would darken the bright spot and lighten the shadow.

**Saturation**

This is the "strength" of the color. Let me give you an example. Imagine you buy a brand-new shirt. It's super red. Like cherry red. The reddest shirt ever. Now, you wear it and over the years wash it a bunch. Over time it losses its "redness" and begins to fade.

When you first bought the shirt, it had a high saturation. When you washed it and it got faded and gray, it became low saturation.

When you bump the saturation in your photo up, it makes all the colors really pop. Be careful though because too much can make it seem acidic. Lower the saturation and everything will fade to gray.

**Vibrance**

Vibrance is kind of like saturation but with a limit. It affects only the less saturated colors in an image and tries to protect skin tones.

**Warmth/Color Temperature**

This makes your image look more orange/reddish or blue. That's pretty much it.

**Sharpness**

This defines an image's clarity. Raise it and the image will look more defined. Too much and you'll start to see "noise" (that's when your image looks grainy).

**Now What?**

Congratulations on making it through this book! I hope you found the information presented easy to use and simple to understand to aid you in learning how to produce consistent, top-quality content.

**In summary, here is what we have learned:**

- Your phone is all you need when you are just starting out.

- There is no correlation to the price of your equipment to your success as an online speaker; just speak.

- Looking and sounding professional is easily done once you know a few technical aspects.

I believe that theory by itself will only get you so far. To obtain the full benefits of what this book is presenting, I encourage you to put these principles to the test. Book a podcast, plan a social media campaign for a few weeks, host a webinar, or make a video.

Use what you've learned in this book and you will reduce the stress of creating content, speak like a natural born leader online, and add value and contribute to the lives of your audience through powerful speaking. Do it consistently and you will attract more people to you. Before long, you can kiss anxiety goodbye!

The only way to get better is through action.

Just make sure that action is Consistent, Quick, Engaging and Beautiful. Do this and you will eliminate your fear of speaking online and attract the right audience to you!